

Attorney Docket No. 108298749US Disclosure No. 03-0866.00/US

PTO/SB/08a/b (07-05)

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Substitut	Substitute for form 1449A/B/PTO		Complete if Known		
Jubanan	Substitute for form 1443/ASE TO			Application Number	10/785,466-Conf. #8567
INFORMATION DISCLOSURE				Filing Date	February 23, 2004
STATEMENT BY APPLICANT			PLICANT	First Named Inventor	Kyle K. Kirby
• • • • • • • • • • • • • • • • • • • •				Art Unit	2878
	(Use as many sheets as necessary)			Examiner Name	B. J. Livedalen
Sheet	1	of	6	Attorney Docket Number	108298749US

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (il Innown)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
Be		US-10/845,304	ļ	Jiang et al.		
02		US-10/857,948		Boettiger et al.		
PZ		US-10/863,994		Akram et al.	 	
BZ		US-10/864,974		Kirby et al.		
BI		US-10/867,352		Farnworth et al.		
		US-10/867,505		Farnworth et al.		
05		US-10/879,398		Akram et al.		
Be.		US-10/879,838		Kirby et al		
OE		US-10/893,022	·	Hall et al.		
132		US-10/894,262		Farnworth et al.		
100 ×	-	US-10/901,851		Derderian et al.		
PL		US-10/910,491		Bolken et al.		
BE		US-10/915,180		Street et al.		
32		US-10/919,604		Farnworth et al.		
BC		US-10/922,177		Oliver et al.		
記	_	US-10/922,192		Famworth		
BC		US-10/925,406		Oliver		
	 	US-10/925,501		Oliver		
nc n2		US-10/925,502		Watkins et al.		
R		US-10/927,550		Derderian et al.		
BE	 	US-10/927,760		Chong et al.		
me.	-	US-10/928,598		Kirby		
80		US-10/932,296	 	Oliver et al.		
PC	├─	US-11/027,443		Kirby		
Be	H	US-11/054,692	<u> </u>	Boemler		
ne		US-11/056,211		Hembree et al.		
pt	_	US-11/056,484		Boettiger et al.		
ME	 	US-11/061,034	<u> </u>	Boettiger		
100	_	US-11/146,783		Tuttle et al.		
150	 	US-11/169,546		Sulfridge		
BE	_	US-11/169,838		Sulfridge		
RE		US-11/177,905		Akram		
87	T	US-11/209,524		Akram		
BZ	T	US-11/217,169		Hiatt et al.		
180	1	US-11/217,877		Oliver et al.		
8	1	US-11/218,126		Farnworth et al.		
为文	†	US-11/218,243		Kirby et al.		
930	1	US-2002/0006687-A1	01-17-2002	Lam		
132	1	US-2002/0057468-A1	05-16-2002	Segawa et al.		
BC	†	US-2002/0089025-A1	07-11-2002	Chou		
RC	1	US-2002/0096729-A1	07-25-2002	Tu et al.		
122	1	US-2002/0113296-A1	08-22-2002	Cho et al.		
030	1	US-2002/0145676-A1	10-10-2002	Kuno et al.	<u>l</u> _	

Date Considered Bu her Examiner Signature

PTO/SB/08a/b (07-05)
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Substit	Substitute for form 1449A/B/PTO		Complete if Known		
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INF	ORMATI	ON DISC	LOSURE	Filing Date	February 23, 2004
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				Art Unit	2878
	(Use as man	y sheets as nec	essary)	Examiner Name	B. J. Livedalen
Sheet	2	of	6	Attorney Docket Number	108298749US

BZ	US-2003/0062601-A1	04-03-2003	Harnden et al.	
100	US-2004/0012698-A1	01-22-2004	Suda et al.	
0.7	US-2004/0023469-A1	02-05-2004	Suda	
p2	US-2004/0038442-A1	02-26-2004	Kinsman	1. 11. 11.
BZ	US-2004/0041261-A1	03-04-2004	Kinsman	
1	US-2004/0082094-A1	04-29-2004	Yamamoto	
12	US-2004/0214373-A1	10-28-2004	Jiang et al.	
2	US-2004/0245649-A1	12-09-2004	Imaoka	
	US-2005/0052751-A1	06-21-2005	Liu et al.	
RZ RZ	US-2005/0104228-A1	05-19-2005	Rigg et al.	
RZ	US-2005/0110889-A1	05-26-2005	Tuttle et al.	
BZ	US-2005/0127478-A1	06-16-2005	Hiatt et al.	
BZ	US-2005/0151228-A1	07-14-2005	Tanida et al.	
132 13C	US-2005/0236708-A1	10-27-2005	Farnworth et al.	
35	US-2005/0254133-A1	11-17-2005	Akram et al.	
K2	US-3,345,134	10-03-1967	Heymer et al.	
(20)	US-4,534,100	08-13-1985	Lane	
BE,	US-4,906,314	03-06-1990	Farnworth et al.	
35	US-5,130,783	07-14-1992	McLellan	
C.	US-5,371,397	12-06-1994	Maegawa et al.	
RZ	US-5,424,573	06-13-1995	Kato et al.	
R	US-5,435,887	07-25-1995	Rothschild et al.	
	US-5,505,804	04-09-1996	Mizuguchi et al.	
132	US-5,560,047	05-06-2003	Choi et al.	
タフ	US-5,593,913	01-14-1997	Aoki	
37 32 82	US-5,605,783	02-25-1997	Revelli et al.	
182	US-5,672,519	09-30-1997	Song et al.	
182 182	US-5,694,246	12-02-1997	Aoyama et al.	
R2	US-5,708,293	01-13-1998	Ochi et al.	
RZ	US-5,771,158	06-23-1998	Yamagishi et al.	
RC	US-5,776,824	07-07-1998	Farnworth et al.	
RC	US-5,811,799	09-22-1998	Wu	
KC	US-5,821,532	10-13-1998	Beaman et al.	
3	US-5,857,963	01-12-1999	Pelchy et al.	
RC RC	US-5,861,654	01-19-1999	Johnson	
RC	US-5,877,040	03-02-1999	Park et al.	
BC	US-5,897,338	04-27-1999	Kaldenberg	
RC	US-5,914,488	06-22-1999	Sone	
78Z	US-5,977,535	11-02-1999	Rostoker	
R<	US-5,998,862	12-07-1999	Yamanaka	
RZ	US-6,080,291	06-27-2000	Woodruff et al.	
1	US-6,104,086	08-15-2000	Ichikawa et al.	
RC	US-6,114,240	09-05-2000	Akram et al.	
RC	US-6,236,046-B1	05-22-2001	Watabe et al.	
BE	US-6,259,083-B1	07-10-2001	Kimura	
BC	US-6,266,197-B1	07-24-2001	Glenn et al.	
RZ	US-6,274,927-B1	08-14-2001	Glenn	
Examiner	<i>A</i>		Date	2/0/-0
Signature	Bue W	red	Considered	2/17/06

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PTC/SB/08a/b (07-05)
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Substitute for form 1449A/B/PTO	Complete If Known		
	Application Number	10/785,466-Conf. #8567	
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Attorney Docket Number

6

F	1	1-2		
PS	US-6,285,064-B1	09-04-2001	Foster	
PZ	US-6,351,027-B1	02-26-2002	Giboney et al.	
DZ	US-6,372,548-B1	02-14-2002	Bessho et al.	
BL	US-6,407,381-B1	06-18-2002	Glenn et al.	
BC	US-6,411,439-B2	06-25-2002	Nishikawa	
A	US-6,483,652-B2	11-19-2002	Nakamura	
BG	US-6,503,780-B1	01-07-2003	Glenn et al.	
182	US-6,566,745-B1	05-20-2003	Beyne et al.	
3/	US-6,603,183-B1	08-05-2003	Hoffman	
SZ	US-6,617,623-B2	09-09-2003	Rhodes	
BC	US-6,661,047-B2	12-09-2003	Rhodes	
18/	US-6,667,551-B2	10-04-2001	Hanaoka et al.	
BC	US-6,670,986-B1	12-30-2003	Ben Shoshan et al.	
Ř-	US-6,686,588-B1	02-03-2004	Webster et al.	
BC	US-6,703,310-B2	12-19-2002	Mashino et al.	
B	US-6,774,486-B2	08-10-2004	Kinsman	
15	US-6,778,046-B2	08-14-2003	Stafford et al.	
132	US-6,791,076-B2	09-14-2004	Webster	
82	US-6,795,120-B2	09-21-2004	Takagi et al.	
13/	US-6,797,616-B2	09-28-2004	Kinsman	
BC	US-6,800,943-B2	10-05-2004	Adachi	
BS	US-6,813,154-B2	11-02-2004	Diaz et al.	
BZ	US-6,828,663-B2	12-07-2004	Chen et al.	
2	US-6,828,674-B2	12-07-2004	Karpman	
BC	US-6,844,978-B2	01-18-2005	Harden et al.	
P	US-6,864,172-B2	04-01-2004	Noma et al.	
<i>B</i> <	US-6,882,021-B2	04-19-2005	Boon et al.	
30	US-6,885,107-B2	04-26-2005	Kinsman	
85	US-6,934,065-B2	08-23-2005	Kinsman	
80	US-6,946,325-B2	09-16-2004	Yean et al.	

	FOREIGN PATENT DOCUMENTS								
Examiner Cit	Cito	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,	Г			
	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (# known)	MM-OD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear				
BL		JP-59-101882-A	06-12-1984	NEC Corp.		Г			
132		JP-59191388	10-30-1984	Victor Co. of Japan Ltd.					
BZ		WO-90/05424-A1	05-17-1990	Lenz					
BZ		JP-07-263607-A	10-13-1995	Sumitomo Kinzoku Ceramics		Г			
36		EP-0 886 323	12-23-1998	Eastman Kodak Company					
86		JP-2001-077496-A	03-23-2001	NGK insulators Ltd.					
BC.		EP-1 157 967-A2	11-28-2001	Lucent Technologies Inc.					
BL.		WO-02/075815-A1	09-26-2002	Atmel Grenoble S.A.		Γ			
132		WO-02/095796-A2	11-28-2002	STMicroelectronics SA		Г			

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heet	4	of	6	Attorney Docket Number	108298749US	

R1	FR-2 835 654-A1	08-08-2003 STMicroelectronics SA	
182	WO-2004/054001-A2	06-24-2004 Augusto	

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
BL		AACHBOUN, S. and P. RANSON, "Cryogenic etching of deep narrow trenches in silicon," J. Vac. Sci. Technol. A 18(4), July/Aug 2000, pp. 1848-1852.	
BL		AACHBOUN, S. and P. RANSON, "Deep anisotropic etching of silicon," J. Vac. Sci. Technol. A 17(4), Jul/Aug 1999, pp. 2270-2273.	
BC		AUSTIN, M.D. and S.Y. CHOU, "Fabrication of 70 nm channel length polymer organic thin-film transistors using nanoimprint lithography," Applied Physics Letters, Vol. 81, No. 23, pp. 4431-4433, December 2, 2002, American Institute of Physics.	
13/		BLACKBURN, J.M. et al., "Deposition of Conformal Copper and Nickel Films from Supercritical Carbon Dioxide," Science, Vol. 294, pp. 141-145, October 5, 2001.	
BZ		BRUBAKER, C. et al., "Ultra-thick Lithography for Advanced Packaging and MEMS," SPIE's 27th Annual International Symposium on Microlithography 2002, March 3 - 8, 2002, Santa Clara, CA.	
86	-	CHENG, Yu-T. et al., "Vacuum Packaging Technology Using Localized Aluminum/Silicon-to-Glass Bonding," Journal of Microelectromechanical Systems, Vol. 11, No. 5, pp. 556-565, October 2002.	
BZ		DuPont Electronic Materials, Data Sheet, Pyralux PC 2000 Flexible Composites, 4 pages, October 1998, http://www.dupont.com/fcm .	
BC		Edmund Industrial Optics, Mounted IR Filters, 1 page, retrieved from the Internet on June 30, 2003, http://www.edmundoptics.com .	
BL		HAMDORF, M. et al., "Surface-rheological measurements on glass forming polymers based on the surface tension driven decay of imprinted corrugation gratings," Journal of Chemical Physics, Vol. 112, No. 9, pp. 4262-4270, March 1, 2000, American Institute of Physics.	
BC		HIRAFUNE, S. et al., "Packaging Technology for Imager Using Through-hole Interconnection in Si Substrate," Proceeding of HDP'04, IEEE, pp. 303-306, July 2004.	
BC		IBM, Zurich Research Laboratory, EPON SU-8 photoresist, 1 page, retrieved from the Internet on January 21, 2003, http://www.zurich.ibm.com/st/mems/su8.html >.	
34		Intrinsic Viscosity and Its Relation to Intrinsic Conductivity, 9 pages, retrieved from the Internet on October 30, 2003, http://www.ciks.cbt.nist.gov/~garbocz/paper58/node3.html .	
BL		KING, B. et al., Optomec, Inc., M3D™ Technology, Maskless Mesoscale™ Materials Deposition, 5 pages, http://www.optomec.com/downloads/M3D%20White%Paper%20080502.pdf , retrieved from the Internet on June 17, 2005.	

Examiner	8.		Date	2/17/166
Signature	1200	wes	Considered	2/1//00

PTO/SB/08a/b (07-05) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it contains a valid OMB control number.

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				Art Unit	2878
			essary)	Examiner Name	B. J. Livedalen
Sheet	5	of	6	Attorney Docket Number	108298749US

BL	Kingpak Technology, Inc. "CMOS Image Sensor Packaging," 1 page, retrieved from the Internet on August 26, 2003, http://www.kingpak.com/CMOSImager.html .
RC	KRAMER, S.J. et al., "Annual Report - Applications of Supercritical Fluid Technology to Semiconductor Device Processing," pp. 1-29, November 2001.
BC	Kyocera Corporation, Memory Package, 1 page, retrieved from the Internet on December 3, 2004, http://global.kyocera.com/prdct/semicon/ic_pkg/memory_p.html >.
BL	LIN, Tim (Zhigang) and Rick YOON, "One Package Technique of Exposed MEMS Sensors," pp. 105-108, 2002 International Symposium on Microelectronics, September 2002.
134	MA, X. et al., "Low Temperature Bonding for Wafer Scale Packaging and Assembly of Micromachined Sensors," Final Report 1998-1999 for MICRO Project 98-144, 3 pages, Department of Electrical & Computer Engineering, University of California, Davis.
BL	Micro Chem, Nano SU-8, Negative Tone Photoresist Formulations 50-100, 4 pages, February 2002, http://www.microchem.com/products/pdf/SU8_50-100.pdf >.
36	Optomec, Inc., M3D™ Technology, Maskless Mesoscale Materials Deposition (M3D), 1 page, http://www.optomec.com/html/m3d.htm , retrieved from the Internet on August 15, 2003.
B<	Optomec, Inc., M3D™, Maskless Mesoscale™ Materials Deposition, 2 pages, http://www.optomec.com/downloads/M3DSheet.pdf , retrieved from the Internet on June 17, 2005.
BZ	Photo Vision Systems, Inc., "Advances in Digital Image Sensors," 22 pages, First Annual New York State Conference on Microelectronic Design, January 12, 2002.
BL	SHEN, XJ. et al., "Microplastic embossing process: experimental and theoretical characterizations," Sensors and Actuators, A 97-98 (2002) pp. 428-433, Elsevier Science B.V.
BZ	Tapes II International Tape and Fabrication Company, Electronics and Electrical Tapes, 2 pages, 2003, http://www.tapes2.com/electronics.htm .
BZ	TransChip, 1 page, retrieved from the Internet on August 26, 2003, http://www.missionventures.com/portfolio/companies/transchip.html .
ISC	TransChip, Inc., CMOS vs CCD, 3 pages, retrieved from the Internet on December 14, 2005, http://www.transchip.com/content.aspx?id=127 .
152	TransChip, Inc., Technology, 3 pages, retrieved from the Internet on December 14, 2005, http://www.transchip.com/content.aspx?id=10 .
BC	UCI Integrated Nanosystems Research Facility, "Cleaning procedures for glass substrates," 3 pages, Fall 1999.
BZ	UCI Integrated Nanosystems Research Facility, "Glass Etch Wet Process," 3 pages, Summer 2000.
R	WALKER, M.J., "Comparison of Bosch and cryogenic processes for patterning high aspect ratio features in silicon," 11 pages, Proc. SPIE Vol. 4407, p. 89-99, MEMS Design, Fabrication, Characterization, and Packaging, Uwe F. Behringer; Deepak G. Uttamchandani; Eds., April 2001.
32	Xsil, Via Applications, 1 page, http://www.xsil.com/viaapplications/index.htm , retrieved from the Internet on July 22, 2003.
BL	Xsil, Vias for 3D Packaging, 1 page, http://www.xsil.com/viaapplications/3dpackaging/index.htm , retrieved from the Internet on July 22, 2003.

Examiner Signature	Bun	her	Oate Considered	2/17/06

Attorney Docket No. 108298749US Disclosure No. 03-0866.00/US

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BL	YE, X.R. et al., "Immersion Deposition of Metal Films on Silicon and Germanium Substrates in Supercritical Carbon Dioxide," Chem. Mater. 2003, 15, 83-91.	
BZ	YOSHIDA, J. "TransChip rolls out a single-chip CMOS imager," 3 pages, EE Times, July 18, 2003.	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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